IN THE CLAIMS:

1. (previously presented) A secure composite door assembly for protecting flight crew in an aircraft, said flight crew having a cockpit area and a passenger area, and said composite door providing securement between said cockpit area and said passenger area, said composite door assembly comprising:

at least one layer adjacent to the passenger area comprised of a ultra-high molecular weight polyethylene fabric impregnated with a phenolic resin matrix resulting in a first layer whereby said first layer functions to blunt sharp projectiles;

at least one layer of ultra-high molecular weight polyethylene fabric impregnated with an epoxy resin matrix resulting in a second layer, said second layer located and between said first layer or layers and a third layer or layers adjacent to the cockpit area, whereby said second layer functions to absorb energy properties of blunted projectiles; and

at least one layer adjacent to the cockpit area comprised of ultra-high molecular weight polyethylene fabric impregnated with a phenolic resin matrix resulting in a third layer, whereby said third layer functions to capture blunted projectiles.

2. (previously presented) The security composite door assembly according to claim 1, wherein said ultra-high molecular weight polyethylene fabric resulting in a first layer comprises a dense weave.

3. (previously presented) The security composite door assembly according to claim 1, wherein said ultra-high molecular weight polyethylene fabric resulting in a second layer comprises a loose weave.

4. (previously presented) The security composite door assembly according to claim 1, wherein said ultra-high molecular weight polyethylene fabric resulting in a third layer comprises a dense weave.

5. (previously presented) The security composite door assembly according to claim 1, further comprising a laminate layer secured to a passenger facing surface of said first layer.

6. (previously presented) The security composite door assembly according to claim 1, wherein said door assembly is appropriately trimmed and drilled for retro-fitting upon existing aircraft cockpit doors.

7. (previously presented) The security composite door assembly according to claim 1, wherein the door assembly are, at least in part, transparent.

8. (previously presented) A method for improving the security of an aircraft door comprising the steps of:

preparing the existing cockpit door from an aircraft to accept a secure composite door assembly;

installing a secure cockpit door which consists of at least one layer adjacent to the passenger area comprised of fabric impregnated with a phenolic resin matrix, at least one layer adjacent to the cockpit area comprised of fabric

impregnated with a phenolic resin matrix, and at least one layer of 8HS fabric impregnated with an epoxy resin matrix located between said layer or layers adjacent to the passenger area and said layer or layers adjacent to the cockpit area.

9. (previously presented) An improved cockpit door for aircraft, said cockpit door comprising:

at least one layer adjacent to the passenger area comprised of ultra-high molecular weight polyethylene fabric impregnated with a phenolic resin matrix;

at least one layer adjacent to the cockpit area comprised of ultra-high molecular weight polyethylene fabric impregnated with a phenolic resin matrix; and

at least one layer of ultra-high molecular weight polyethylene fabric impregnated with an epoxy resin matrix located between said layer or layers adjacent to the passenger area and said layer or layers adjacent to the cockpit area.

10. (withdrawn) A method of manufacturing a secure composite door comprising the steps of:

impregnating at least one ultra-high molecular weight polyethylene fabric with a phenolic resin creating a first composite layer;

applying pressure and heat in the range of 300 to 400 degrees Fahrenheit to said first composite layer;

impregnating at least one ultra-high molecular weight polyethylene fabric with a epoxy resin creating a second composite layer;

combining said first layer with said second composite layer creating a first composite assembly with one side exposing said first composite layer and the other side exposing said second composite layer;

applying pressure and heat in the range of 300 to 400 degrees Fahrenheit to said combined first composite and second composite layer creating a second composite assembly;

impregnating at least one ultra-high molecular weight polyethylene fabric with a second resin creating a third composite layer;

combining said third layer with said second composite layer side of said second composite assembly; and

applying pressure and heat in the range of 300 to 400 degrees Fahrenheit to said combined first composite assembly and third composite layer to form a third composite assembly.

11. (withdrawn) The method of manufacturing a secure composite door according to claim 10, further comprising the step of applying laminate at least one side of the second composite assembly to form a finished composite assembly.

12. (withdrawn) The method of manufacturing a secure composite door according to claim 10, further comprising the step of applying laminate at least one side of the second composite assembly to form a finished composite assembly.

13. (withdrawn) The method of manufacturing a secure composite door according to claim 10, further comprising the step of trimming the finished composite assembly and drilling holes for affixing hardware.

14. (withdrawn) A method of manufacturing a secure composite door comprising the steps of:

impregnating at least one ultra-high molecular weight polyethylene fabric with a phenolic resin creating a first composite layer;

impregnating at least one ultra-high molecular weight polyethylene fabric with a epoxy resin creating a second composite layer;

combining said first layer with said second composite layer creating a first composite assembly with one side exposing said first composite layer and the other side exposing said second composite layer;

impregnating at least one ultra-high molecular weight polyethylene fabric with a second resin creating a third composite layer;

combining said third layer with said second composite layer side of said first composite assembly; and

applying pressure and heat in the range of 300 to 400 degree Fahrenheit to said combined first composite assembly and third composite layer to form a second composite assembly.

15. (withdrawn) The method of manufacturing a secure composite door according to claim 14, further comprising the step of applying pressure and heat in the range of 300 to 400 degrees Fahrenheit to said first composite layer.

16. (withdrawn) The method of manufacturing a secure composite door according to claim 14, further comprising the step of applying pressure and heat in the range of 300 to 400 degrees Fahrenheit to said first composite assembly.

17. (once amended) A secure composite assembly comprising:

at least one layer comprised of a ultra-high molecular weight polyethylene densely woven fabric impregnated with a phenolic resin matrix resulting in a first layer whereby said first layer functions to blunt sharp projectiles;

at least one layer of ultra-high molecular weight polyethylene loosely woven fabric impregnated with an epoxy resin matrix resulting in a second layer, said second layer located ~~and~~ between said first layer or layers and a third layer or layers, whereby said second layer functions to absorb energy properties of blunted projectiles; and

at least one layer adjacent to ~~the~~ a cockpit area comprised of ultra-high molecular weight polyethylene densely woven fabric impregnated with a phenolic resin matrix resulting in a third layer, whereby said third layer functions to capture blunted projectiles.